



# Environmental Purchasing Bulletin

## Porous Concrete

August 14, 2007

King County EP Bulletin #105



### In This Issue

- Introduction
- Porous Concrete
- For More Information
- Environmental Purchasing Program

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- 2006 Annual Report
- Past EP Bulletins

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### Introduction

King County's Road Services Division is currently constructing an intersection improvement project that incorporates low impact development (LID) initiatives including porous concrete sidewalks and an onsite bioretention facility or "rain garden."

The Road Services Division received a LID stormwater grant of \$424,375 from the Washington State Department of Ecology's Water Quality Program to support construction of porous concrete sidewalks; installation of a rain garden; monitoring of the project and educating others about the site.

### Porous Concrete



Wilson Concrete Construction  
crew pouring  
1100 sq. yards  
of porous concrete  
for a King County sidewalk  
project

Military Road S at S. 272<sup>nd</sup> St.  
August 3, 2007

LID approaches are becoming more prevalent in residential street applications. This project will demonstrate how these approaches can be applied to larger scale transportation projects.

Project managers say the intersection of Military Road and 272nd is a good place to start with porous concrete. There are no adjacent streams or wetlands and before this project, there was no treatment of storm water before it reached Star Lake, about 800 feet away. The LID components of this project will treat pollutants from the



impervious surface added by this project, and reduce runoff generated from these new surfaces.

Installing porous concrete sidewalks and a rain garden reduces the amount of impervious surfaces and helps maintain the natural hydrology of the site. It will also lower the cost of stormwater infrastructure by eliminating the need for a retention vault or pond.

Testing by the King County Roads Division Materials Lab showed good strength properties of the porous concrete test pour. Roads Engineering Services Section and its Environmental Unit will monitor the performance of the sidewalk and rain garden for at least the first three years of operation in accordance with DOE grant requirements.

## For More Information

- [King County Roads Division LID website](#)
  - [Fact Sheet - LID Project Military Road S at S. 272<sup>nd</sup> St.](#)
  - [Porous Concrete](#)
  - [Rain Garden](#)
- [King County DOT Dash](#)
- [LID Guide – Technical Guidance Document for Puget Sound](#)

## Environmental Purchasing Program

The King County Environmental Purchasing Program assists County agencies in implementation of King County [Executive Policy CON-7-1-2](#), which requires agencies to use recycled and other environmentally preferable products wherever practicable.

The program assembles information about these products and makes it available to specific agency users who can evaluate them and develop applications in County projects.

These environmental purchasing bulletins contain information about the results of product evaluations and other accomplishments of County agencies. We hope this information will help you find ways to use environmentally preferable products in the work of your agency and that you will contact us if we can help you with further information or if you have suggestions.